

IN THE CLAIMS:

Amend claims 1, 4, 6, 8, 10 and 12 as indicated below:

1. (Amended) A semiconductor photodetection device, comprising:

A7 a semiconductor substrate of a first conductivity type;

a photodetection layer formed on said semiconductor substrate;

a region of a second conductivity type opposite to said first conductivity type being formed in a part of said photodetection layer; and

an electrode applying an electric field to said photodetection layer via said region of said second conductivity type such that said electric field acts in a thickness direction of said photodetection layer,

said photodetection layer comprising:

a first semiconductor layer having a first thickness and accumulating therein a compressive strain and absorbing an optical radiation; and

a second semiconductor layer having a second thickness smaller than said first thickness and accumulating therein a tensile strain, said first semiconductor layer and said second semiconductor layer being stacked alternately and repeatedly in said photodetection layer,

wherein said tensile strain in said second semiconductor layer has a magnitude larger than a magnitude of said compressive strain in said first semiconductor layer.

- A8 4. (Amended) A semiconductor photodetection device as claimed in claim 1, wherein

a sum of the second [thickness] thicknesses of said second semiconductor [layer] layers is smaller

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cont. than a sum of the first and second thicknesses by a factor of $(0.9 \times L^{1/4} \times \epsilon)$, wherein ϵ represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of microns.

A9 6. (Amended) A semiconductor photodetection device as claimed in claim 5, wherein a sum of the second [thickness] thicknesses of said second semiconductor layers is smaller than a sum of the first and second thicknesses by a factor of $(0.9 \times L^{1/4} \times \epsilon)$, wherein ϵ represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of percent.

A10 8. (Amended) A semiconductor photodetection device as claimed in claim 7, wherein a sum of the second thicknesses of said second semiconductor layers is smaller than a sum of the first and second thicknesses by a factor of $(0.9 \times L^{1/4} \times \epsilon)$, wherein ϵ represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of microns.

A¹¹ 10. (Amended) A semiconductor photodetection device as claimed in claim 9, wherein a sum of the second thicknesses of said second semiconductor layers is smaller than a sum of the first and second thicknesses by a factor of $(0.9 \times L^{1/4} \times \epsilon)$, wherein ϵ represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of microns.

A¹² 12. (Amended) A semiconductor photodetection device as claimed in claim 11, wherein a sum of the second thicknesses of said second semiconductor layers is smaller than a sum of the first and second thicknesses by a factor of $(0.9 \times L^{1/4} \times \epsilon)$, wherein ϵ represents the strain accumulated in said first semiconductor layer in terms of percent and L represents a sum of a total thickness of said first semiconductor layers in said photodetection layer and a total thickness of said second semiconductor layers in said photodetection layer in terms of microns.
